UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,757	12/28/2001	Mark Alexander Shand	200302047-1	3560

22879   7590   11/03/2006

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER
DURAN, ARTHUR D

ART UNIT	PAPER NUMBER
3622	

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2001*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-39* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/12/02*.
4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-39 have been examined.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agostinelli

(2003/0088832) in view of Gazdzinski (6,615,175).

Claim 1, 3-9, 11-13, 16-18, 25, 27, 28, 31-33: Agostinelli discloses an information

display system for targeting information to a plurality of viewers proximate to an information

display, the system comprising:

at least one sensor for determining features of a subset of the plurality of viewers,

comprising at least one of:

a visual sensor for determining one or more physical features of the subset of the plurality

of viewers; and

an audio sensor for determining one or more audible features of the subset of the

plurality of viewers;

a database comprising a plurality of information files, each information file of the

plurality of information files being targeted to at least one class of viewers associated with at

least one of a physical feature and an audible feature;

an information file selection module for selecting one or more of the information files to

display on the information display, based upon at least one determined feature of the subset of

the plurality of viewers (Abstract; Figures 1-6; Paragraphs [11-31]).

Agostinelli further discloses capturing/monitoring/tracking audio and voice in order to

better classify the user and to better target the user ([42, 46, 47, 59]; claims 6, 8, 11).

Agostinelli does not explicitly disclose speech recognition and keywords.

However, Gazdinski discloses capturing/monitoring/tracking audio and voice and speech

in order to better classify the user and to better target the user (col 20, line 41-col 21, line 44).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to add Gazdinski's speech analysis for targeting to Agostinelli's audio

and voice analysis for targeting. One would have been motivated to do this in order to better

target the user with content of interest.

Claim 2, 10, 26: Agosintelli further discloses that the content selection happens with or

without the purposeful user action to direct the informational file selection (Abstract).

Claim 14, 29: Agostinelli and Gazdzinski disclose the above. Agostinelli does not

explicitly disclose utilizing Blind Source Separation. However, utilizizing Blind Source

Separation is obvious in light of the Applicant's Specification ([31], 'Blind Source Separation

("BSS"). . .an established audio signal processing technique). One would be motivated to user

BSS to take advantage of established or old and well known audio signal processing techniques.

Claim 15, 30: Agostinelli and Gazdzinski disclose the above. Agostinelli further discloses that the monitoring determines location information for the extracted voice sources, and further uses the determined location information to cluster sets of extracted voice sources, each clustered set of extracted voice sources being associated with a subset of the plurality of viewers ([63,65,66]). Note that Agostinelli groups and classifies different sets of users within the viewing users.

Agostinelli further discloses monitoring the user distance from the ad/billboard/kiosk which is equivalent to user location information [5, 61].

Agostinelli does not explicitly disclose using audio to determine different user locations.

However, Gazdzinski further discloses tracking different groups of users within a user set and displaying different ads nearby to the different users based on user group activity/speech/etc (col 21, lines 44-55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Gazdzinski's using audio to determine location and different groups to Agostinelli's clustering different groups. One would have been motivated to do this in order to better determine the audience and target the group(s).

Claim 19, 20, 34, 35: Agostinelli further discloses including a computer vision module for processing a signal received from the visual sensor to determine physical attributes, including an approximation of at least one of the set consisting of clothing, gender, age, ethnicity, height, and weight (Fig. 5; [47, 56, 61, 65]).

Claim 21, 37: Agostinelli further discloses utilizing Bayesian logic ([63]).

Claims 22, 36: Agostinelli discloses the above. Agostinelli further discloses utilizing a variety of probabilistic or classification techniques ([63]).

Agostinelli does not explicitly disclose utilizing or heuristic logic to classify. However, heuristic logic is an old and well known technique.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that different logic techniques can be used to classify including heuristic logic. One would have been motivated to do this in order to better take advantage of old and well known logic techniques in order to better utilize the data concerning users and better classify and target the users.

Claim 23, 38: Agostinelli further discloses that the statistical modeling module, in conjunction with determining the one or more representative demographics, associates a statistical weighting with each of a plurality of potential demographics, each statistical weighting representing a probability that the associated potential demographic accurately represents the subset of the plurality of viewers ([63, 65, 66]).

Claim 24, 39: Agostinelli further discloses that the statistical modeling module further determines an approximate number of persons comprising the subset of the plurality of viewers by using at least one attribute of the subset of the plurality of viewers ([58, 65, 66, 63]; claim 10).

3.   Claims 22, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agostinelli (2003/0088832) in view of Gazdzinski (6,615,175) in view of Bhatt (20020118883).

Agostinelli discloses the above. Agostinelli further discloses a variety of probabilistic or classification techniques ([63]).

Agostinelli does not explicitly disclose utilizing or heuristic logic to classify. However, heuristic logic is an old and well known technique.

And, Bhatt discloses utilizing Bayesian or heuristic logic to classify ([35]; claims 1 and 2).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that logic techniques can be used to classify. One would have been motivated to do this in order to better utilize the data concerning users to better classify and target the users.

Conclusion

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a) Cohen-Solal (6,873,710) discloses dynamic content presented to a user(s) thru a kiosk/billboard based on audio and/or visual information obtained about the user(s) from cameras and/or microphones;

b) Zimmerman (2003/0028430) presents related features; and c) Alpdemir (20020035474) presents speech recognition features.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur Duran whose telephone number is (571) 272-6718. The examiner can normally be reached on Mon- Fri, 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Arthur Duran
Primary Examiner
8/10/2006